

Application Serial No. 10/634,392
Reply to Office Action of December 15, 2004

PATENT
Docket: CU-3320

REMARKS/ARGUMENTS

Reconsideration is respectfully requested.

In response to the objections to the drawings and the Specification, appropriate corrections have been made to the Specification pages 1-2 and 7-8. No new matter has been added. Withdrawal of the objections is respectfully requested.

Claims 1-8 are pending in the present application before this amendment. By the present amendment, Claims 1-7 have been amended; Claim 8 has been cancelled without prejudice; and Claims 9-12 have been added. No new matter has been added.

At the outset, Claims 1-7 have been amended to have one or a plurality of lamps in the structure to correspond to the structure as shown at least in FIG. 3 and the corresponding text in the Specification.

Claims 1-2, 4-5, and 7-8 stand rejected under 35 U.S.C. § 103(a) as being obvious over a Japanese Patent Publication No. 63-200102 (Ito) in view of U.S. Patent No. 4,991,070 (Stob). The "et al." suffix, which may appear after a reference name, is omitted in this paper.

Applicant respectfully agrees that Ito does not teach or suggest, inter alia, the claimed --reflection plate rotatably disposed around the lamp and having an opening through which light can be concentrated on the display panel--.

In addition, Ito fails to teach or suggest the claimed --lamp disposed **under** the display panel--. As clearly shown in the cited Abstract of Ito, the light source completely wrapped around inside a cylinder 15 of color filters 12, 13, 14, and this is mounted

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completely **outside** the surface area below the LCD diffusing plate 9. The color light emanating through one of the filters 12, 13, 14 of Ito is reflected on a sloped transmission body 10, 10a onto the LCD diffusing plate 9.

This is completely different from the claimed invention as shown, for example, in an embodiment of FIGS. 3A-3C. As shown, the back light lamp 23 is disposed **under** the display panel. As illustrated by FIG. 4, the reflection plate such as 27 having an opening concentrates light on the display panel such as 25.

The cited Stob reference also fails to teach or suggest the claimed —lamp disposed under the display panel—.

Therefore, at least on this ground alone, Applicant respectfully submits that Claim 1 is considered to be allowable over the cited Ito and/or Stob references, since not every element is taught or suggested by the cited references, whether they are considered individually or in combination.

In addition, Applicant respectfully notes that the cited Stob reference is not analogous to the presently claimed invention.

According to MPEP §2141.01(a), any prior art reference, in order to be modified or combined with another prior art reference, must be “analogous” to the claimed invention. In order for a prior art reference to be “analogous” to the Applicants’ claimed invention, the prior art reference (1) **must** be “in the field of Applicants’ endeavor;” or (2) if, not, then it **must** be reasonably pertinent to the problem addressed. *In re Wood*, 599 F.2d 1032 (CCPA 1979).

Applicant respectfully submit that neither one of the criteria has been met.

First, Stob cannot be considered to be “in the same field of Applicant’s

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endeavor," because the presently claimed invention is in the field of liquid crystal display having the improved backlight structure, whereas Stob as clearly shown in FIG. 1 is in the field of ordinary open space lighting using an ordinary and conventional fluorescent lamp that one can purchase in a ordinary hardware store. These two fields are recognized and known by those skilled in the pertinent art to be very distinct and separate fields of lighting technology.

In *In re Clay*, 966 F.2d 656 (see MPEP §2141.01(a)), the Court held that a cited reference by the USPTO and the invention at issue are involved in **different** fields of endeavor although both are involved in the **same** petroleum technology. In MPEP §2141.01(a):

[The Court in *In re Clay*] found that the inventions involved in **different** fields of endeavor since the reference taught the use of the gel in a **different structure** for a **different purpose** under **different temperature and pressure conditions**, and since the application related to storage of liquid hydrocarbons rather than extraction of crude petroleum.

As *In re Clay* make it clear that just because two references may be considered to relate to a same technology such as the petroleum technology (or, for example, the lighting in the present case), the two references are not automatically considered to be in the same field of endeavor. Just merely because Stob relates to lighting, there is not a scintilla of disclosure in Stob to reasonably support a conclusion that Stob and the presently claimed invention are in the same field of endeavor.

Second, Stob is not analogous because Stob is not reasonably pertinent to the problem with which Applicants of the present invention were concerned. Also in MPEP 2141.01(a):

The court [in *In re Clay*] also found the reference was **not** reasonably pertinent to

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the problem with which the inventor was concerned because a person having ordinary skill in the art would not reasonably have expected to solve the problem of dead volume in tanks for refined petroleum by considering a reference dealing with plugging underground formation anomalies.

The teachings in Stob are related to illuminating an open space using "a conventional light bulb or element 26" (Stob col. 3, line 33). In contradistinction, the presently claimed invention is concerned with solving the problems related to effective backlight illumination of a semiconductor LCD device.

For the reasons above, Stob is not reasonably pertinent to the problem with which Applicants of the presently claimed invention are concerned, and accordingly, it is respectfully submitted that Stob cannot be considered to be analogous to the presently claimed invention. In case the Examiner is not persuaded by this argument, Applicant respectfully requests a specific showing of support in Stob that this reference is analogous to the presently claimed invention such that at least one of the two following required criteria is met: (1) Stob must "in the field of Applicants' endeavor;" or (2) if, not, then Stob must be reasonably pertinent to the problem addressed. In re Wood, 599 F.2d 1032 (CCPA 1979) and MPEP §2141.01(a).

Furthermore, according to MPEP §2143.01, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference to combine the reference teaching.

The suggestion or motivation to combine references must come from the cited prior art references, either explicitly or implicitly. The mere fact that the teachings of the prior art can be modified or combined does not establish a motivation or suggestion to

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combine and make the resultant combination prima facie obvious. The prior art must suggest the desirability of the combination. MPEP §2143.01.

As discussed above, there is no teaching or suggestion in Stob about the backlight illumination suitable for a semiconductor LCD device. There is no teaching or suggestion in Stob that it is desirable to combine its teaching of the conventional fluorescent light fixture with the teaching of another reference such as Ito to show that the combination of these references teach the claimed invention of the claimed backlight unit structure for a semiconductor LCD.

The Applicants respectfully submit that the conclusive statement of obviousness in the Office Action appears to be based on an impermissible presumption. Applicants' response to such a conclusive statement of obviousness is that the basis for improperly finding the presently claimed invention obvious appears to be the teaching found in this application, and not in the prior art. Thus, the obviousness rejection in the Office Action improperly relies on the impermissible hindsight reasoning, because even the issue of obviousness would not be obvious absent Applicants' disclosure in this application that discloses the backlight unit in an LCD. (See 37 C.F.R. § 1.104(c)(2).)

According to MPEP §2142, the hindsight reasoning based on Applicants' own disclosure is not permitted. Knowledge of Applicants' disclosure must be set aside. The Examiner must step back in time to when the invention was unknown and just before it was made. Only the fact gleaned from the prior art may be used.

Claims 3 and 6 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Ito in view of Stob, and further in view of U.S. Patent No. 6,583,579 (Tsumura).

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Applicant respectfully submit that Claims 3 and 6 are allowable at least since they depend from one of the independent claims considered to be allowable as asserted above.

Further, Tsumura fails to teach or suggest the presently claimed invention at least on the following grounds, whether Tsumura is considered individually or in combination with Ito and/or Stob.

The backlight element of the present invention teaches allowing the light, which passed an opening to be concentrated or to be directed to the gate line to which the gate signal applied. However, Tsumura col. 6 line 52 to col. 7 line 23 discloses providing the light storage member 21 between display unit 11 and the backlighting element 13, and the light storage member 21 absorbs light from the backlighting element 13 or natural light, thereby reducing the driving power of the backlighting element 13 or intermittently driving the backlighting element 13 at proper time intervals. Therefore, the synchronism of the cited reference is not identical with that of the present invention.

As to the new Claims 9-12, Claim 9 is supported by at least the limitations of the originally filed Claims 1 and 3 as well as the corresponding Specification and drawings; Claim 10 recites is supported by at least the limitations of the originally filed Claim 6 as well as the corresponding Specification and drawings; Claim 12 is supported by at least the limitations of the originally filed Claim 4 or 7 as well as the corresponding Specification and drawings; and Claim 11 is supported by at least the limitations of the originally filed Claim 1 as well as the corresponding Specification and drawings.

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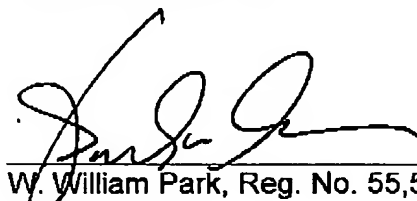
As shown in the drawings (e.g., FIGS. 4-6) and described in the Specification, these newly added claims claim, inter alia, the backlight element comprising an opening portion and a light excluding portion, and no new matter has been added.

For the reasons set forth above, Applicant respectfully submits that Claims 1-7, 9-12, now pending in this application, are in condition for allowance over the cited references. This amendment is considered to be responsive to all points raised in the Office Action. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the outstanding rejections and earnestly solicits an indication of allowable subject matter.

Should the Examiner have any remaining questions or concerns, the Examiner is encouraged to contact the undersigned attorney by telephone to expeditiously resolve such concerns.

Respectfully submitted,

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